REMARKS

Claims 1-23 are currently pending. Claims 3, 5, and 9-11 are original. Claims 2, 8, 13, and 15-17 were previously presented. Claims 1, 7, 12, and 18-23 are currently amended to improve form and to incorporate the subject matter of claims 4, 6, and 14. Claims 4, 6 and 14 are canceled without prejudice. No new matter is added.

Claims 1-11 stand rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. As claims 18-23 also depend from and add limitations to claim 1, Applicants believe claims 18-23 also stand rejected under 35 U.S.C. §112, second paragraph, for the same reasons as claims 1-11.

Claims 1-4, 6-9, 11-14, 16, and 18-21 stand rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 6,434,698 to Maiolani et al. ("Maiolani") in view of U.S. Patent No. 6,931,568 to Abbondanzio et al. ("Abbondanzio"). Claims 10 and 17 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Maiolani in view of Abbondanzio, and further in view of U.S. Patent No. 3,783,250 to Fletcher et al. ("Fletcher"). Claims 5 and 15 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Maiolani in view of Abbondanzio and further in view of U.S. Patent No. 5,123,089 to Beilinski et al. hereinafter "Beilinski").

Applicants hereby traverse the rejections and respectfully request reconsideration in view of the remarks set forth below.

Amendments to Claim 1, 4, and 18-23 obviate rejections under 35 U.S.C. §112, Second Paragraph

The Examiner objected to the lack of clarity in the use of the terms "each card" "plurality of cards", "each card", "another card", and "respective card" in claim 1. Claim 1 is currently amended to improve form and clarify the terms in the claim. In particular, the term "the card" at the end of the claim has been replaced with "the respective card itself". Claims 21-23 are currently amended to improve form and clarify similar terms in each respective claim. Applicants strongly believe the

amendments obviate the 35 U.S.C. §112, Second Paragraph rejections of claims 1-11, and 21-23, and respectfully request reconsideration and withdrawal of the rejections.

Maiolani in combination with Abbondanzio does not teach or suggest "isolating a card"

Applicants hereby traverse the rejections of process claim 1, and corresponding system claim 12, under 35 USC §103(a) and respectfully request reconsideration thereof in view of the remarks set forth below.

Claim 1 recites a process for arbitrating between active and protected status, comprising the steps of identifying a plurality of cards capable of communicating with each other, allowing each card of the plurality of cards to make a determination of the health of another one of the cards of the plurality of cards, allowing each card of the plurality of cards to deliver to a different card of the plurality of cards a vote representative of each card's determination of the health of the different card, having a respective card of the plurality of cards determine as a function of delivered votes a health status representative of whether the respective card itself is to be isolated, and isolating the respective card as a function of delivered votes, wherein isolating a card includes entering a state that prevents the card from exchanging data.

The cited prior art, including Maiolani in combination with Abbondanzio does not teach, describe, or suggest a process for arbitrating between active and protected status comprising "having a respective card of the plurality of cards determine as a function of delivered votes a health status representative of whether the respective card itself is to be isolated" and "isolating the respective card as a function of delivered votes, wherein isolating a card includes entering a state that prevents the card from exchanging data", as recited in Applicants' claim 1.

Maiolani is directed to a distributed processor system with each processor able to vote on the status of another processor. In the event of a fault in the processor, the processor can be reset remotely by the other microprocessors via the system communications bus. In particular, Maiolani states that "in the event of a fault occurring in the microprocessor 5, the CPU 10 can be reset remotely by the other microprocessors of the system via the system bus 7" (Maiolani, Column 4,

Lines 6-11). Thus, the faulty or failing microprocessor in Maiolani is reset remotely by the other microprocessors of the system via the system bus. Furthermore, prior to providing this reset signal or RESET, Miaolani's system provides an interrupt signal or IRQ to the faulty or failing microprocessor to attempt to rectify the fault or failure. To the contrary, each of Applicants' respective cards "determine as a function of delivered votes a health status representative of whether the respective card itself is to be isolated" and isolates "the respective card as a function of delivered votes", as recited in claim 1, without requiring a remote reset signal from the other cards in the plurality of cards.

Thus, Applicants' respective cards determine their own health status representative of whether they are to be isolated, assuming, arguendo, that a reset signal would isolate the respective card. In this regard, Applicants note that the Action equivocally equates the act of applying a reset to a processor in Miaolani's system to the act of isolating a card in Applicants' claimed subject matter. However, Applicants claim 1 clearly states that "isolating a card includes entering a state that prevents the card from exchanging data", and further clarify in the Specification that "the card may not be isolated upon power-up, cold start, or reset" (Specification, Page 11, Lines 2-3). Therefore, Maiolani does not teach, describe, or suggest "isolating the respective card as a function of delivered votes, wherein isolating a card includes entering a state that prevents the card from exchanging data", as recited in Applicants' claim 1, because Miaolani's teaching of providing interrupt signals and/or reset instructions could not be used to isolate Applicant's cards. In fact the teaching of Maiolani, even when taking in combination with Abbondanzio, would most certainly render Applicants' claimed process inoperable.

Abbondanzio is directed to a system having redundant service processors and to a method of managing the service processors when one fails, and fails to bridge the gap in the Miaolani's teaching. As stated in the Action, Maiolani fails to teach Applicants' "card" environment. However, Applicants point out that even assuming arguendo that Miaolani's processor, DRM module, and COMMS module were all considered a single combined card, Maiolani in combination with Abbondanzio still does not teach or suggest the process as recited in claim1.

Therefore, the combination of Maiolani and Abbondanzio fails to describe, teach or suggest a process for arbitrating between active and protected status comprising "having a respective card of the plurality of cards determine as a function of delivered votes a health status representative of whether the respective card itself is to be isolated" and "isolating the respective card as a function of delivered votes, wherein isolating a card includes entering a state that prevents the card from exchanging data", as recited in Applicants' claim 1.

In view of the above remarks, neither Maiolani nor Abbondanzio, alone or in combination, teaches, describes, or suggests each and every element of claim 1. To establish prima facie obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. In re Royka, 490 F.2d 981, 180 USPQ 580 (CCPA 1974). "All words in a claim must be considered in judging the patentability of that claim against the prior art." In re Wilson, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970). If an independent claim is nonobvious under 35 U.S.C. 103, then any claim depending therefrom is nonobvious. In re Fine, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988). Therefore, the 35 U.S.C. §103(a) rejection of claim 1 should be withdrawn. Because claims 2-3, 5, 7-11, and 21-23 depend from, and are limited by, claim 1, the 35 U.S.C §103 rejections of these claims should also be withdrawn.

Maiolani in combination with Abbondanzio does not teach or suggest an "isolation processor" or "isolating a card"

Claim 12 recites a system with "each card of the plurality of cards having a card monitor for monitoring parameters of other cards in the system representative of operating characteristics, a vote out mechanism, responsive to the monitored parameters, for generating a vote signal representative of an assessment of each card's operating condition, and a vote tally mechanism, responsive to vote signals received from other cards in the system, and capable of changing an operational state of a respective card in response thereto, and an isolation processor for isolating the respective card as a function of delivered votes, wherein isolating the respective card includes preventing the card from exchanging data".

The cited prior art, including Maiolani in combination with Abbondanzio does not teach, describe, or suggest a system with "an isolation processor for isolating the respective card as a function of delivered votes, wherein isolating the respective card includes preventing the card from exchanging data", as recited in Applicants' claim 12, which incorporates the subject matter of now-canceled claim 14. The Action itself is silent as to which element(s) in Maiolani or Abbondanzio teach or suggest an isolation processor. Applicants note that the DRM and COMM modules illustrated in FIG. 1 in Maiolani do not include an isolation processor. Furthermore, the cards in Abbondanzio do not include an isolation processor. In fact, Maiolani and Abbondanzio are silent as regards to "an isolation processor for isolating the respective card", as recited in Applicants' claim 12. Furthermore, for at least the reasons given above with regards to claim 1, Maiolani does not teach, describe, or suggest "isolating the respective card as a function of delivered votes, wherein isolating a card includes entering a state that prevents the card from exchanging data", as recited in Applicants' claim 12.

Further, the system disclosed by Miaolani is of the type mentioned in the background of Aapplicants' disclosure, that requires a decision to be made by systems that are, by nature, failing. As noted in the background, prior art fail safe techniques have employed system level processes that transition a malfunctioning card out of the system. In contrast, applicants' system will, at the respective card level, have a card transition itself out of the system. Applicants' system would not require, as Miaolani requires, a failing system to process an instruction generated from a consensus level system vote to take itself offline. This reduces complexity and provides more on board control to the isolation system (including an isolation processor) on each respective card.

In view of the above remarks, neither Maiolani nor Abbondanzio, alone or in combination, teaches, describes, or suggests each and every element of claim 12. Therefore, the 35 U.S.C. §103(a) rejection of base claim 12 should be withdrawn. Because claims 13 and 15-19 depend from, and are limited by, claim 12, the 35 U.S.C §103(a) rejections of these claims should also be withdrawn.

CONCLUSION

In view of the foregoing amendments and remarks, Applicants believe the pending application is in condition for allowance.

Applicant believes no fee is due with this response other than those indicated on the attached Transmittals. However, if a fee is due, please charge our Deposit Account No. 18-1945, under Order No. CDPC-P01-011 from which the undersigned is authorized to draw.

Dated: June 24, 2009

Respectfully submitted,

By /Tushar Parlikar/

Tushar Parlikar
Registration No.: 61,715
ROPES & GRAY LLP
One International Place
Boston, Massachusetts 02110
(617) 951-7000
(617) 951-7050 (Fax)
Attorneys/Agents For Applicant